

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P61520/001	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB 03/05311	International filing date (day/month/year) 05.12.2003	Priority date (day/month/year) 05.12.2002
International Patent Classification (IPC) or both national classification and IPC A01N59/16		
Applicant EXOSECT LIMITED et al		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 4 sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the opinion II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the International application

Date of submission of the demand 02.07.2004	Date of completion of this report 21.03.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - P.O. Box Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Lamers, W Telephone No. +31 70 340-3713



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB 03/05311

I. Basis of the report

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-11 as originally filed

Claims, Numbers

1-14 filed with telefax on 22.02.2005

Drawings, Figures

1-6 as originally filed

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB 03/05311

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

see separate sheet

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-14
	No: Claims	
Inventive step (IS)	Yes: Claims	1-14
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB 03/05311

Re Item I

Basis of the report

I.5. The amendments filed with the letter date 22.02.2005 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 34(2)(b) PCT. The amendments concerned is the wording "particles of **soft magnetic material**" which cannot be found in the application as filed, in particular neither on page 2, lines 10 to 32, nor on page 4, lines 1 to 9. This report has been established as if this amendment had not been made and is based on the wording "particles of ... **material, which is capable of becoming magnetically polarized**" which is used in claim 1 as originally filed (Rule 70.2c PCT).

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1: WO 00/01236 A (ASHBY ROGER EDWARD ;HOWSE PHILIP EDWIN (GB); UNIV SOUTHAMPTON (GB)) 13 January 2000 (2000-01-13)
- D2: US-A-3 767 783 (FISCHER J ET AL) 23 October 1973 (1973-10-23)
- D3: EP-A-0 118 667 (COATHYLENE SA) 19 September 1984 (1984-09-19)

V.a. Certain observations on the international application

It would appear from some parts of description of the present application that particles, which have been magnetized already before the surface of a pest is exposed to them, are included in the scope of the alleged invention. (see shallow container 1, wherein soft iron particles are held in place by a material with conducting or magnetic properties; see figure 3, showing a dispenser consisting of material with conducting or magnetic properties and

being coated with soft iron particles; see example a) wherein the particulate composition is placed onto magnetic material) These parts of the description are in contradiction to the wording of independent claim 1, which explicitly relates to particles which remain unmagnetised until exposed to a field associated with the pest. This inconsistency between the claims and the description leads to doubt concerning the matter for which protection is sought, thereby rendering the claims unclear, Article 6 PCT.

V.b. Novelty

Document D1 discloses methods, compositions and traps related to the ones as presented in the claims of the present application, but differing in that only particles are used which contain or consist wholly of hard magnetic material, thus particles which are permanently magnetised. Soft magnetic materials may only be used if they have been magnetised or become magnetised on admixture with hard magnetic material before they are brought into contact with the pest (see D1: page 2, line 30 - page 4, line 10). As claim 1 relates to particles of soft magnetic material which remains unmagnetised until exposure to the (electric or magnetic) field associated with the pest, the subject matter of this claim it is new over the teaching of D1 (Art. 33(2) PCT).

Document D2 discloses pesticides in particulate formulation, the particles comprising a central core consisting of metallic couples, comprising i.a. iron. The particle size is between 1 and 100 microns, the cores are coated by a layer of polymeric material and the exterior layer comprises various insecticides and acaricides (see D2: col. 2, lines 21 - 62; col. 3, lines 53 - 64, col. 3, line 74 - col. 4, line 12) Document D3 discloses compositions comprising particles with a diameter of less than 50 microns and consisting of iron and polymers, the compositions being sprayed together with powdery insecticides in the form of suspensions (see D3: page 2, line 31 - page 4, line 16; page 6, lines 5 - 14). None of the documents D2 and D3 disclose the method of claim 1 in which the surface of a pest is exposed to the particles, the particles becoming magnetically polarised by the electric or magnetic field associated with the pest and thereby getting attached to the pest.

Hence the subject matter of claim 1 is new (Art. 33(2) PCT). Claims 2-14 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty (Art.

33(2) PCT).

V.c. Inventive Step

Document D1 is regarded as representing the closest prior art to the subject-matter of claim 1, and shows methods, compositions and traps related to the ones as presented in the claims of the present application, but differing in that only particles are used which contain or consist wholly of hard magnetic material, thus particles which are permanently magnetised. Soft magnetic materials may only be used if they have been magnetised or become magnetised on admixture with hard magnetic material before they are brought into contact with the pest (see D1: page 2, line 30 - page 4, line 10).

The subject-matter of claim 1 therefore differs from D1 in that particles of magnetisable material are used which remain unmagnetised until they are exposed to the (electric or magnetic) field associated with the pest and only upon exposure to this field become magnetically polarized and get attached to the pest.

The problem to be solved by the present invention may therefore be regarded as providing particles of other material which become attached to and stay on the surface of pests.

The solution to this problem as proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons: Document D1 does not suggest to use unmagnetised material and does not teach the existence of a (electric or magnetic) field associated with the pest, which is able to induce magnetism in an unmagnetised material (which is capable of becoming magnetically polarised) in such a way, that particles of such material become attached to the pest. Furthermore example b) shows the superiority of particles as claimed in terms of retention on the pest over particles of ferrosilicate and strontium ferrite as disclosed in D1.

Claims 2-14 are dependent on claim 1 and as such also meet the requirements of the PCT with respect inventive step (Art. 33(3) PCT).

V.d. Industrial Applicability

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB 03/05311

The subject matter of claims 1-14 appears to be industrially applicable (Art. 33(4) PCT).

CLAIMS:

1. A method of controlling pests, which method comprises:
providing a particulate composition containing
5 particles of an unmagnetised, soft magnetic material, said
particles being associated with at least one pesticide or
behaviour modifying chemical;
exposing a surface of a pest to said particles, wherein
said particles become magnetically polarized by the electric
10 or magnetic field associated with the pest and become
attached to the pest, and wherein said particles remain
unmagnetised until exposed to the field associated with the
pest.
- 15 2. A method so claimed in claim 1, wherein said particles
comprise metallic iron, nickel or cobalt, or mixtures
thereof.
- 20 3. A method as claimed in claim 1 or claim 2, wherein said
particles are coated with a material which is a carrier for
the pesticide or behaviour modifying chemical, or coated
directly with the pesticide or behaviour modifying chemical.
- 25 4. A method so claimed in claim 3, wherein the carrier
comprises a lipid, a resin or a polymer.
- 30 5. A method as claimed in claim 4, wherein the lipid is a
fatty acid, or an ester or salt thereof.
6. A method as claimed in any one of the preceding claims,
wherein said particles have a unit weight corresponding to

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that of a sphere of a diameter in the range of from 0.1 to 50 micrometres.

7. A method as claimed in any one of the preceding claims,
5 wherein the pesticide is an insecticide, acaricide,
fungicide, insect growth regulator or chemosterilant.

8. A method as claimed in any one of claims 1 to 6,
wherein the pesticide is a bacterium, fungus or virus.

10 9. A method as claimed in any one of claims 1 to 6,
wherein the behaviour modifying chemical is a pheromone or
allelochemical.

15 10. A method as claimed in any one of claims 1 to 8,
wherein the pesticide is a chemical or naturally occurring
insecticide or acaricide which comprises up to 10% by weight
of the particulate composition.

20 11. A method as claimed in any one of claims 1 to 6 or
claim 8, wherein the pesticide is a bacterium, fungus or
virus which comprises up to 40% by weight of the particulate
composition.

25 12. A method as claimed in any one of claims 1 to 6 or
claim 9, wherein the behaviour modifying chemical comprises
from 1 picogram to 1 microgram per particle having an
average particle size of from 0.1 to 50 micrometers.

30 13. A method as claimed in any one of the preceding claims,
wherein the pest is lured to a dispenser in which one or
more surfaces is coated with the particulate composition.

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14. A method as claimed in claim 13, wherein the pest is lured to the dispenser by a chemical attractant, biological attractant, food source, light, colour, visual pattern, 5 infra red or acoustic source, or a combination thereof.



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PCT Chapter II

22 February 2005

BY FAX TO: 00-3170-340-3016
FROM: 020-7430 7600 - 7 PAGE(S)
CONFIRMATION BY COURIER

EPA EPO-OEB DG 1 Reçu:		
22.02.2005		
11		ANL ZEICHN

Dear Sirs,

International Patent Application No. PCT/GB03/005311
Exosect Limited
Representative's Ref: RPS/P61620/001

I refer to the Written Opinion of 9 December 2004 issued in respect of the above-identified International patent application. I am most grateful to the IPEA for the extensions of time to the term set for filing a response. I now submit herewith the applicant's response.

I now file herewith an amended set of claims 1 to 14 to replace the claims currently on file. For the Examiner's information, the following changes have been made to the claims.

(i) The subject-matter of method claim 1 has been clarified to more clearly distinguish the invention from the cited prior art. In particular, claim 1 now recites:

*"A method of controlling pests, which method comprises:
providing a particulate composition containing particles of an unmagnetised,
soft magnetic material, said particles being associated with at least one pesticide or
behaviour modifying chemical;*

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EUROPEAN PATENT OFFICE

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exposing a surface of a pest to said particles, wherein said particles become magnetically polarized by the electric or magnetic field associated with the pest and become attached to the pest, and wherein said particles remain unmagnetised until exposed to the field associated with the pest."

Support for the revised wording may be found in the description on page 2, lines 10 to 32, and page 4, lines 1 to 9.

- (ii) Claims 15 to 24 have been deleted. For the avoidance of doubt, the applicant hereby reserves the right to reintroduce these claims and/or file a divisional patent application in respect of any or all of the deleted subject-matter.
- (iii) It is submitted that the amended claims now presented are clearly supported by the application as originally filed and do not add any new matter.

Novelty and Inventive Step (Article 33 (2) and (3) PCT)

1. It is submitted that the amended claims now presented are novel and inventive over the cited prior art.
2. The present invention is based on the discovery that unmagnetised, soft magnetic particles (eg metallic iron, nickel or cobalt) are capable of becoming magnetically polarized when subjected to the field associated with an insect. The particles are associated with at least one pesticide or a behaviour modifying chemical.
3. It is stressed that the method concerns the use of soft magnetic materials, which are unmagnetised prior to being exposed to the surface of the pest. The particles become magnetically polarized by the electric or magnetic field associated with the pest and thereby become attached to the pest. The particles remain unmagnetised until they are exposed to the field associated with the pest.
4. The revised wording of claim 1 makes it clear that the soft magnetic particles are not pre-magnetised, but instead only become magnetised when exposed to the field associated with the pest.
5. With regard to the cited document D1 (WO 00/01236), this document is acknowledged in the present application and its disclosure is discussed on pages 2 and 4 of the description. D1 teaches the use of hard magnetic materials that have been pre-magnetised before being contacted with the pest. While D1 mentions that soft magnetic materials such as iron, iron oxide or ferrosilicates may also be used, this is only if they have been magnetised or become magnetised on admixture with hard magnetic materials (see page 4, lines 6 to 10). Accordingly, there is no

suggestion in D1 to use soft magnetic materials which have not been admixed with a hard magnetic material and which have not been pre-magnetised. There is also no teaching in D1 that the field associated with the pest would be able to induce magnetism in a soft magnetic particle.

6. With regard to the cited document D2 (Us 3,767,783), this document would appear to be less relevant than D1. In particular, there is no discussion of magnetism in this document and certainly no teaching that pests such as insects have an electric field associated therewith. There is no disclosure in D2 of a method of controlling pests which includes the steps recited in amended claim 1 as now presented.
7. D2 is directed to stable pesticide compounds, such as halogenated organic compounds, which are formulated to obtain their complete or nearly complete destruction within a pre-determined time after field application. The formulations include an integrated, self-destructing pesticide particle comprising a pesticide, a material that reacts with the pesticide, and a means to delay the reaction for a pre-determined length of time.
8. With reference to Figure 1, there is shown an individual formulated pesticide particle which comprises a central core 11, an acid-producing material 12 covering the core, a film-forming layer 13 covering the layer 12, and finally an exterior layer 14 covering layer 13. D2 suggests that the central core material 11 may include a metallic couple such as iron-copper. This is discussed further in column 3, lines 15 to 27, and it is clear that the metallic couple comprises an iron centre covered with metallic copper. As a consequence, the final particle would in fact comprise an iron centre with a copper coating thereon. Covering the copper coating would be the acid-producing material 12, then the film-forming layer 13, and finally the exterior layer 14. There is no suggestion in D2 that such a multi-layer particle would ever adhere to an insect by virtue of the electric field associated with the insect. To the contrary, the purpose of the metallic core is to react with the pesticide, by polymerising or reducing it, so as to produce a biologically inactive form of the pesticide. The self-destructing pesticide disclosed in D2 is therefore fundamentally different from the present invention.
9. Document 3 would appear to be even less relevant than document D2. Again, there is no teaching or suggestion in this document of the method now recited in claim 1.
10. In view of the foregoing, it is submitted that the amended method claims now presented are novel and involve an inventive step over the cited documents. None of the cited documents teaches or suggests a method of controlling pests comprising the steps now recited in amended claim 1. Nor do any of the cited documents contemplate that the field associated with the pest could be used to magnetise soft magnetic materials (the materials being unmagnetised until being exposed to the field

EUROPEAN PATENT OFFICE

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22 February 2005

associated with the pest) so as to adhere the particles to the pest. For these reasons, it is submitted the claims meet the requirements of Articles 33(2) and 33(3) PCT.

Clarity

11. While the Examiner is correct in his statement that particles with too high a weight will not stay on the pest, the applicant would prefer not to limit claim 1 to particles having a diameter of from 0.1 to 50 microns. The applicant submits that this numerical range is a preferred feature and not an essential feature. Claim 1 as now presented is considered to be self-contained in that it is directed to a method of controlling pests in which soft magnetic particles become attached to the pest when subjected to the field associated with the pest. In other words, the claim already implies that particles with too high a weight will not stay on the pest. Imposing the preferred numerical range in respect of particle diameters would unduly limit the claims, particularly since this range is not associated with the inventive concept discussed above.

Miscellaneous

12. It is appreciated that the description will need to be adapted in due course so as to bring it into conformity with the amended claims and I confirm that I shall attend to the necessary amendments following entry into the European Regional Phase. At that time, the cited documents D2 and D3 will be acknowledged in the description (D1 is already acknowledged).
13. In the light of the comments given above, the Examiner is asked to reconsider his objections to the lack of novelty and/or lack of inventive step of the claims in this application. Favourable reconsideration is requested.

The below-named representative would be happy to discuss this case over the telephone should this be considered beneficial.

Yours faithfully,



Rohan P SETNA

Representative for the Applicant

Tel: + 44 (0)207 430 7500

Enclosure: Replacement claims 1-14

617628; RPS; LSB

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CLAIMS:

1. A method of controlling pests, which method comprises:
providing a particulate composition containing
5 particles of an unmagnetised, soft magnetic material, said
particles being associated with at least one pesticide or
behaviour modifying chemical;
exposing a surface of a pest to said particles, wherein
said particles become magnetically polarized by the electric
10 or magnetic field associated with the pest and become
attached to the pest, and wherein said particles remain
unmagnetised until exposed to the field associated with the
pest.
- 15 2. A method so claimed in claim 1, wherein said particles
comprise metallic iron, nickel or cobalt, or mixtures
thereof.
- 20 3. A method as claimed in claim 1 or claim 2, wherein said
particles are coated with a material which is a carrier for
the pesticide or behaviour modifying chemical, or coated
directly with the pesticide or behaviour modifying chemical.
- 25 4. A method so claimed in claim 3, wherein the carrier
comprises a lipid, a resin or a polymer.
- 30 5. A method as claimed in claim 4, wherein the lipid is a
fatty acid, or an ester or salt thereof.
6. A method as claimed in any one of the preceding claims,
wherein said particles have a unit weight corresponding to

- 13 -

that of a sphere of a diameter in the range of from 0.1 to 50 micrometres.

7. A method as claimed in any one of the preceding claims,
5 wherein the pesticide is an insecticide, acaricide, fungicide, insect growth regulator or chemosterilant.

8. A method as claimed in any one of claims 1 to 6, wherein the pesticide is a bacterium, fungus or virus.

10

9. A method as claimed in any one of claims 1 to 6, wherein the behaviour modifying chemical is a pheromone or allelochemical.

15

10. A method as claimed in any one of claims 1 to 8, wherein the pesticide is a chemical or naturally occurring insecticide or acaricide which comprises up to 10% by weight of the particulate composition.

20

11. A method as claimed in any one of claims 1 to 6 or claim 8, wherein the pesticide is a bacterium, fungus or virus which comprises up to 40% by weight of the particulate composition.

25

12. A method as claimed in any one of claims 1 to 6 or claim 9, wherein the behaviour modifying chemical comprises from 1 picogram to 1 microgram per particle having an average particle size of from 0.1 to 50 micrometers.

30

13. A method as claimed in any one of the preceding claims, wherein the pest is lured to a dispenser in which one or more surfaces is coated with the particulate composition.

- 14 -

14. A method as claimed in claim 13, wherein the pest is lured to the dispenser by a chemical attractant, biological attractant, food source, light, colour, visual pattern, 5 infra red or acoustic source, or a combination thereof.

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

SETNA, Rohan Piloo
BOULT WADE TENNANT
Verulam Gardens
70 Gray's Inn Road
LONDON WC1X 8BT
GRANDE BRETAGNE

PCT

WRITTEN OPINION
(PCT Rule 66)

		Date of mailing (day/month/year)	09.12.2004
Applicant's or agent's file reference P61520/001		REPLY DUE	within 1 month(s) from the above date of mailing
International application No. PCT/GB 03/05311	International filing date (day/month/year) 05.12.2003	Priority date (day/month/year) 05.12.2002	
International Patent Classification (IPC) or both national classification and IPC A01N59/16			
Applicant EXOSECT LIMITED et al			

1. This written opinion is the **first** drawn up by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I Basis of the opinion
 - II Priority
 - III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV Lack of unity of invention
 - V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI Certain documents cited
 - VII Certain defects in the international application
 - VIII Certain observations on the international application
3. The applicant is hereby **invited to reply** to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 05.04.2005

Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer LAMERS, W Formalities officer (incl. extension of time limits) Cherqui, E Telephone No. +31 70 340-2643
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I. Basis of the opinion

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"*):

Description, Pages

1-11 as originally filed

Claims, Numbers

1-24 as originally filed

Drawings, Figures

1-6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
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- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
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- the drawings, sheets:

5. This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

6. Additional observations, if necessary:

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-24
Inventive step (IS)	Claims	1-24
Industrial applicability (IA)	Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1: WO 00/01236 A (ASHBY ROGER EDWARD ;HOWSE PHILIP EDWIN (GB); UNIV SOUTHAMPTON (GB)) 13 January 2000 (2000-01-13) cited in the application
- D2: US-A-3 767 783 (FISCHER J ET AL) 23 October 1973 (1973-10-23)
- D3: EP-A-0 118 667 (COATHYLENE SA) 19 September 1984 (1984-09-19)
- D4: WO 94/00980 A (HOWSE PHILIP EDWIN ;UNIV SOUTHAMPTON (GB)) 20 January 1994 (1994-01-20) cited in the application

V.a. Certain observations on the international application

It is clear from the description on page 6, paragraph 3, that particles with too high weight will not stay on the pest. As the alleged invention cannot be carried out with such particles, the feature, that particles must have a unit weight which corresponds to that of a sphere of diameter between 0.1 and 50 micrometers, is essential to the definition of the invention. Since the independent claims 1 and 15 do not contain this feature they does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

V.b. Novelty

The subject-matter of claims 1-24 appears to be not new in the sense of Article 33(2) PCT:

Document D1 discloses methods, compositions and traps identical to the ones in the present application, the compositions being defined as comprising particles containing or consisting of magnetic material. The definition of magnetic material includes "soft magnetic materials, such as Fe (...) if they have been magnetised" (see D1: page 4. lines 6 - 10).

The definition of the method and/or composition of the present application as given in claims 1 and 15 by the wording "initially" unmagnetized material does not exclude

particles which have been already magnetized in the moment that the surface is exposed to them, because it is not clear to which period of time the term "initially" relates. It would furthermore appear from the examples of the present application that particles, which have been magnetized already before the surface of a pest is exposed to them, are included in the scope of the alleged invention. (see shallow container 1, wherein soft iron particles are held in place by a material with conducting or magnetic properties; see figure 3, showing a dispenser consisting of material with conducting or magnetic properties and being coated with soft iron particles; see example a) wherein the particulate composition is placed onto magnetic material)

It follows, that the subject matter of claims 1 - 24 is not new with respect to document D1 (Art. 33(2) PCT).

Document D2 discloses pesticides in particulate formulation, the particles comprising a central core consisting of metallic couples, comprising i.a. iron. The particle size is between 1 and 100 microns, the cores are coated by a layer of polymeric material and the exterior layer comprises various insecticides and acaricides (see D2: col. 2, lines 21 - 62; col. 3, lines 53 - 64, col. 3, line 74 - col. 4, line 12) With respect to D2, the subject matter of claims 1-4, 6, 7, 10, 15 - 18, 20 and 21 is not new (Art. 3(2) PCT).

(Attention is drawn to Chapter IV, 7.6 of the PCT International Preliminary Examination Guidelines as in force from 9 October 1998, and Chapter 12.05 of the PCT International Search and Preliminary Examination Guidelines as in force from March 25, 2004, saying that for determining novelty of the subject-matter of claims directed to a physical entity, non-distinctive characteristics of a particular intended use, should be disregarded.)

Document D3 discloses compositions comprising particles with a diameter of less than 50 microns and consisting of iron and polymers, the compositions being sprayed together with powdery insecticides in the form of suspensions (see D3: page 2, line 31 - page 4, line 16; page 6, lines 5 - 14). With respect to D3 the subject matter of claims 1, 2, 6, 7, 15, 16, 20, 21 is not new (Art. 33(2) PCT). (Attention is drawn to Chapter IV, 7.6 of the PCT International Preliminary Examination Guidelines as in force from 9 October 1998, and Chapter 12.05 of the PCT International Search and Preliminary Examination Guidelines as in force from March 25, 2004, saying that for determining novelty of the subject-matter of claims directed to a physical entity, non-distinctive characteristics of a particular intended use, should be disregarded.)

V.c. Inventive Step

Because the subject matter of claims 1-24 is not new, it can not be considered as involving an inventive step (Art. 33(3) PCT).

V.d. Industrial Applicability

The subject matter of claims 1-24 appears to be industrially applicable (Art. 33(4) PCT).

INTERNATIONAL SEARCH REPORT

In **ional Application No**
PCT/GB 03/05311

A. CLASSIFICATION OF SUBJECT MATTER
**IPC 7 A01N59/16 A01N25/24 A01N25/26 // (A01N59/16, 57:16, 25:26,
25:24, 25:12, 25:08)**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
IPC 7 A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, BIOSIS, CHEM ABS Data**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/01236 A (ASHBY ROGER EDWARD ; HOWSE PHILIP EDWIN (GB); UNIV SOUTHAMPTON (GB)) 13 January 2000 (2000-01-13) cited in the application page 4, line 6 - line 10 page 5, line 22 - page 12, line 4 ---	1-24
X	US 3 767 783 A (FISCHER J ET AL) 23 October 1973 (1973-10-23) column 1, line 59 - column 2, line 2 column 2, line 22 - line 62 column 3, line 53 - line 64 column 4, line 1 - line 12 ---	1-4, 6, 7, 10, 15-18, 20, 21 -/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the International search

23 April 2004

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INTERNATIONAL SEARCH REPORT

In National Application No
PCT/GB 03/05311

C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	<p>WO 94/00980 A (HOWSE PHILIP EDWIN ;UNIV SOUTHAMPTON (GB)) 20 January 1994 (1994-01-20)</p> <p>cited in the application the whole document</p> <p>-----</p>	1-21

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/GB 03/05311

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